

Women and Ischemia Syndrome Evaluation (WISE) Diagnosis and Pathophysiology of Ischemic Heart Disease Workshop

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Session 5

1. Topic and Author

DIABETES AND OTHER METABOLIC STATES

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2. Where we stand in 2002. Overview/rationale for inclusion of topic.

Diabetes is a cardiovascular risk equivalent. However, atherosclerosis starts early in the spectrum of insulin resistance and endothelial dysfunction is present in insulin resistance and hyperinsulinemia. This occurs even prior to the appearance of the Metabolic Syndrome and in premenopausal women. Diabetes in women erases gender protection from coronary artery disease (CAD). Excess adiposity and a proinflammatory milieu contribute to early mechanisms of disease.

3. Current challenges and the most important issues for future research

- A) Define mechanisms by which insulin resistance affects the heart and blood vessels.
- B) Characterize atherosclerotic lesions in diabetes-are there different genes or pathways?
- C) Identify surrogate endpoints for CAD in insulin resistance (i.e. adiponectin, hs c-reactive protein, etc.) and pursue prevention studies. Importantly, define when and what therapy to institute in the spectrum of insulin resistance.
- D) Understand how to deal with the need for hormone replacement therapy in insulin resistant women.
- E) Identify relevant genes and, thus, high risk individuals.

4. Current challenges in the areas of communicating messages to health care community, patients and the public

- A) Obesity is a growing epidemic and a threat to cardiovascular health.
- B) Encourage providers of health care to pay for patient education and weight loss programs.
- C) Underscore the importance of nutrition and physical activity in children.
- D) Develop appropriate screening programs.
- E) Stress reaching blood pressure, glucose, lipid, etc. goals.

5. Translating new findings to improved diagnosis and treatment/saving lives.

- A) Identification of new mechanisms and genes leads to new therapies
- B) Determine whether there is an early role for inhibition of the renine-angiotensin system, PPAR ligands (alpha, gamma, and delta), antiinflammatories
- C) Will genetic screening be useful?

6. References.

Attached Manuscript